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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/940,450

08/29/2001

Jeff S. Eder

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02/26/2010

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EXAMINER

LIVERSEDGE, JENNIFER L

ART UNIT

PAPER NUMBER

3684

MAIL DATE

DELIVERY MODE

02/26/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/940,450
Filing Date: August 29, 2001
Appellant(s): EDER, JEFF S.

B.J. Bennett
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed December 27, 2009 appealing from the Office action mailed March 6, 2009.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

As noted by Appellant, application 09/764,068 and 10/166,758 may be affected or have a bearing on this appeal.

Appellant further indicates that there is some similarity of material for application 10/282,113 but that it "does not appear to pass the "reasonable examiner" test so it was not included." Examiner is unclear as to what the case was not included in? From a review of the file, it appears the examiner was affirmed by the BPAI.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection is incorrect. For purposes of advancing prosecution, examiner has provided a summary of the grounds of rejection as presented in the Final Office Action:

Claims 34, 37, 44, 62, 135, 136, 141, 143, 145, 150, 155, 159 and 164 are rejected under 35 U.S.C. 112 first paragraph.

Claims 34-51, 62-64, 68-70, 90-91 and 134-167 are rejected under 35 U.S.C. 112 second paragraph.

Claims 44-51, 145-149 and 159-163 are rejected under 35 U.S.C. 101.

Claims 34-39, 42-47, 50-52, 135-138, 141-143, 145 and 149 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 7,249,328 B1 to Davis.

Claims 62-63, 68, 70, 90 and 134 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Bielinski, Ray and Bauer.

Claims 40-41, 48-49, 139-140, 146, 150-151 and 154 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Official Notice.

Claims 144, 147, 155-157, 159, 161 and 163 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Srivastava.

Claims 158, 160 and 164-167 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Srivastava and Official Notice.

Claims 64, 69 and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Bielinski, Ray, Bauer and Official Notice.

Claim 148 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Bielinski.

Claim 152 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Official Notice and Srivastava.

Claim 153 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Official Notice and Bielinski.

Claim 162 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Srivastava and Bielinski.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US Patent 7,249,328 B1 to Davis

“How to Sort out the Premium Drivers of Post-Deal Value” by Daniel Bielinski

US Patent 6,018,722 to Ray et al.

“The 1986-88 Stock Market: Investor Sentiment or Fundamentals?” by Bauer et al.

US Patent 6,549,922 B1 to Srivastava et al.

Official Notice

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

Claims 34, 44, 62, 135, 136, 141, 145, 150, 155, 159, 164 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims recite new matter with respect to “an integrated database” and with respect to the limitation “output said database”. Neither of the terms are found within the specification and therefore are improper to use within the claim limitations. Each claim limitation needs to be supported by a particular section in the specification in order to comply with the written description requirement.

Claims 34, 44, 135, 141, 159, 164 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim recites new matter with respect to “a physical object” and “a physical object or substance”. The term(s) are not found within the specification and therefore is improper to use within the

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claim limitations. Each claim limitation needs to be supported by a particular section in the specification in order to comply with the written description requirement.

Claim 136, 145, 155 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim recites new matter with respect to “schema defined categories”. The term is not found within the specification and therefore is improper to use within the claim limitations. Each claim limitation needs to be supported by a particular section in the specification in order to comply with the written description requirement.

Claims 37, 143 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim recites new matter with respect to “schema is statistically valid”. The term is not found within the specification and therefore is improper to use within the claim limitations. Each claim limitation needs to be supported by a particular section in the specification in order to comply with the written description requirement.

Claims 34-51, 62-64, 68-70, 90-91, 134, 135-167 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 34, 44, 135, 145, 150, 155, 159 recite "a common schema as required to transform". It is unclear what is required by this step. By stating that a method is carried out based on some fact patterns or situations, etc. as required renders the claim vague and indefinite. What is required? Also, the fact that the step may or may not be required renders the claim indefinite.

Claims 34, 44, 135, 141, 145, 150, 155, 159, 164 also recite "output said database". It is unclear as to what the outputting of a database really means. Based on the 112 first paragraph rejection for failing to comply with the written description requirement, examiner is uncertain as to how the method step of outputting the database would be performed. For purposes of examination, examiner will assume that it is intended to output data from the database.

Claims 35, 45, 135, 159, 164 are drawn to "where the physical object comprises an organization". It is unclear how an organization is a physical object. An organization is an abstract idea, as opposed to a machine, building or other structural element. For purposes of examination, examiner will interpret the limitations as the data that is representative of an organization.

Claim Rejections - 35 USC § 101

Claims 44-51, 145-149, 159-163 are rejected under 35 U.S.C. 101. Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to a machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In *re Bilski et al*, 88 USPQ 2d 1385 CAFC (2008); *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps fail the first prong of the new Federal Circuit decision since they are not tied to a machine and can be performed without the use of a particular machine.

The mere recitation of the machine in the preamble with an absence of a machine in the body of the claim fails to make the claim statutory under 35 USC 101.

Note the Board of Patent Appeals Informative Opinion *Ex parte Langemyer et al*-

http://iplaw.bna.com/iplw/5000/split_display.adp?fedfid=10988734&vname=ippqcases2

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[&wsn=500826000&searchid=6198805&doctypeid=1&type=court&mode=doc&split=0&scm=5000&pg=0.](#)

In the present application, the method claims recite that the method is a computer implemented method in the preamble, and there is an absence of a machine in the body. At best, the body recites insignificant extra solution activity in a database, as the database is not performing the method steps. To meet the requirements of 101, it is required that the machine by which method steps are carried out are positively recited in the body of the claim such that the claim is tied to machine or provide for transformation of underlying subject matter (such as an article or materials) to a different state or thing. In the present application, the claims fail both prongs of the 101 test. The claims do not positively recite the machine or apparatus to which the method steps are tied, nor do the claims result in the transformation of underlying subject matter to a different state or thing. The claim as amended recites data representative of a physical object, but the claims further state that the physical object is an organization. As noted in the 112 rejection section, an organization is not an article or material but rather an abstract idea, and the data related to the organization can further be an abstract concept in that intangible assets such as intellectual property are included as data. Bilski requires that the subject matter to be transformed be a physical object or substance rather than an abstract idea.

Claim Rejections - 35 USC § 102

Claims 34-39, 42-47, 50-52, 135-138, 141-143, 145, 149 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 7,249,328 B1 to Davis (further referred to as Davis).

Regarding claim 34, Davis discloses a computer readable medium having sequences of instructions stored therein, which when executed cause the processor in a computer to perform a data preparation method, comprising:

Integrating data from a plurality of systems (column 8, lines 29-34; column 10, lines 25-26; column 11, lines 24-27; column 12, lines 26-29 and lines 53-56; column 28, lines 31-34; column 38, lines 50-53)

using xml and a common schema (column 8, lines 40-46 and lines 52-57; column 10, lines 31-33 and lines 52-55; column 11, lines 24-66; column 12, lines 45-56; column 13, lines 34-37; column 15, lines 60-67; column 18, lines 48-54; column 26, lines 65-67; column 27, lines 1-5; column 28, lines 31-34; column 30, lines 42-50; column 30, lines 51-60; column 33, lines 15-47; column 37, lines 5-8; column 38, lines 48-56)

to transform said data into an integrated database and output said [database – data per 112] (column 11, lines 15-64; column 12, lines 45-56; column 13, lines 18-40; column 15, lines 23-42; column 16, lines 11-15; column 26, lines 47-67; column 49, lines 20-28)

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where said data is representative of a [physical object – organization per 112] (column 11, lines 52-55; column 23, lines 62-67; column 45, lines 35-50; column 46, lines 30-33; column 49, lines 32-37).

Regarding claim 44, Davis discloses a computer implemented data preparation method, comprising:

Integrating data representative of a [physical object or substance – organization per 112] from a plurality of systems (column 8, lines 29-34; column 10, lines 25-26; column 11, lines 24-27; column 12, lines 26-29 and lines 53-56; column 28, lines 31-34; column 38, lines 50-53)

using xml and a common schema (column 8, lines 40-46 and lines 52-57; column 10, lines 31-33 and lines 52-55; column 11, lines 24-66; column 12, lines 45-56; column 13, lines 34-37; column 15, lines 60-67; column 18, lines 48-54; column 26, lines 65-67; column 27, lines 1-5; column 28, lines 31-34; column 30, lines 42-50; column 30, lines 51-60; column 33, lines 15-47; column 37, lines 5-8; column 38, lines 48-56)

to transform said data into an integrated database that stores data in accordance with said schema and output said [database – data per 112] (column 11, lines 15-64; column 12, lines 45-56; column 13, lines 18-40; column 15, lines 23-42; column 16, lines 11-15; column 26, lines 47-67; column 49, lines 20-28).

Regarding claim 52, Davis discloses a computer readable medium having sequences of instructions stored therein, which when executed cause the processors in

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a plurality of computers connected via a network (column 12, lines 57-66) to perform the data preparation method of claim 44 (see rejection for claim 44).

Regarding claim 135, Davis discloses a data preparation system, comprising:

A computer with a processor having circuitry to execute instructions;

A storage device available to said processor with sequences of instructions stored therein, which when executed cause the processor to:

Integrate a plurality of data representative of an organization that physically exists from a plurality of organization related systems and an Internet (column 8, lines 29-46; column 9, lines 59-67; column 10, lines 25-26 and lines 38-45; column 11, lines 24-27 and 53-62; column 12, lines 26-29 and lines 53-56; column 28, lines 31-39; column 38, lines 50-53)

Using xml and a common schema (column 8, lines 40-46 and lines 52-57; column 10, lines 31-33 and lines 52-55; column 11, lines 24-66; column 12, lines 45-56; column 13, lines 34-37; column 15, lines 60-67; column 18, lines 48-54; column 26, lines 65-67; column 27, lines 1-5; column 28, lines 31-34; column 30, lines 42-50; column 30, lines 51-60; column 33, lines 15-47; column 37, lines 5-8; column 38, lines 48-56), and

to transform said data into an integrated database that stores data in accordance with said schema and output said [database – data per 112] (column 11, lines 15-64; column 12, lines 45-56; column 13, lines 18-40; column 15, lines 23-42; column 16, lines 11-15; column 26, lines 47-67; column 49, lines 20-28).

Regarding claim 141, Davis discloses a program storage device readable by machine, tangible embodying a program of instructions executable by a machine to perform the method steps in a data processing method, comprising:

Using metadata mapping (column 4, lines 17-32; column 10, lines 19-30; column 13, lines 37-40 and lines 45-50; column 15, lines 56-67; column 17, line 66 – column 18, line 9; column 18, lines 48-64; column 19, lines 3-13; column 20, lines 32-38; column 21, lines 56-59; column 31, lines 5-7; column 33, lines 44-47; column 38, lines 48-65; column 49, lines 19-50; column 50, lines 38-49)

To integrate a plurality of data representative of a [physical object or substance – organization per 112] from a plurality of systems (column 8, lines 29-34; column 10, lines 25-26; column 11, lines 24-27; column 12, lines 26-29 and lines 53-56; column 28, lines 31-34; column 38, lines 50-53)

In accordance with xml and a common schema (column 8, lines 40-46 and lines 52-57; column 10, lines 31-33 and lines 52-55; column 11, lines 24-66; column 12, lines 45-56; column 13, lines 34-37; column 15, lines 60-67; column 18, lines 48-54; column 26, lines 65-67; column 27, lines 1-5; column 28, lines 31-34; column 30, lines 42-50; column 30, lines 51-60; column 33, lines 15-47; column 37, lines 5-8; column 38, lines 48-56)

to transform said data into an integrated database that stores data in accordance with said schema and output said [database – data per 112] (column 11, lines 15-64;

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column 12, lines 45-56; column 13, lines 18-40; column 15, lines 23-42; column 16, lines 11-15; column 26, lines 47-67; column 49, lines 20-28)

Where metadata mapping is guided by a metadata mapping table (column 10, lines 19-53; column 11, lines 24-64; column 12, lines 45-56; column 15, lines 60-67; column 18, lines 2-14; column 20, lines 32-38; column 21, lines 26-61; column 30, lines 51-58; column 33, lines 28-47; column 49, lines 19-47; column 50, lines 38-45).

Regarding claim 145, Davis discloses a computer implemented data method, comprising:

Using metadata mapping (column 4, lines 17-32; column 10, lines 19-30; column 13, lines 37-40 and lines 45-50; column 15, lines 56-67; column 17, line 66 – column 18, line 9; column 18, lines 48-64; column 19, lines 3-13; column 20, lines 32-38; column 21, lines 56-59; column 31, lines 5-7; column 33, lines 44-47; column 38, lines 48-65; column 49, lines 19-50; column 50, lines 38-49)

To integrate a plurality of data representative of an enterprise from a plurality of enterprise related systems (column 8, lines 29-34; column 10, lines 25-26; column 11, lines 24-27; column 12, lines 26-29 and lines 53-56; column 28, lines 31-34; column 38, lines 50-53)

In accordance with xml and a common schema (column 8, lines 40-46 and lines 52-57; column 10, lines 31-33 and lines 52-55; column 11, lines 24-66; column 12, lines 45-56; column 13, lines 34-37; column 15, lines 60-67; column 18, lines 48-54; column 26, lines 65-67; column 27, lines 1-5; column 28, lines 31-34; column 30, lines 42-50;

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column 30, lines 51-60; column 33, lines 15-47; column 37, lines 5-8; column 38, lines 48-56)

to transform said data into an integrated database that stores data using one or more schema defined categories in accordance with said schema and output said [database – data per 112] (column 11, lines 15-64; column 12, lines 45-56; column 13, lines 18-40; column 15, lines 23-42; column 16, lines 11-15; column 26, lines 47-67; column 49, lines 20-28)

Where metadata mapping is guided by a metadata mapping table (column 10, lines 19-53; column 11, lines 24-64; column 12, lines 45-56; column 15, lines 60-67; column 18, lines 2-14; column 20, lines 32-38; column 21, lines 26-61; column 30, lines 51-58; column 33, lines 28-47; column 49, lines 19-47; column 50, lines 38-45).

Regarding claim 35, Davis discloses where the physical object comprises an organization and the common schema includes an organization designation (column 8, lines 37-40; column 10, lines 25-30; column 11, lines 52-62; column 33, lines 31-47; column 46, lines 27-33).

Regarding claim 37, Davis discloses where the common schema is statistically valid and includes a data structure (column 8, lines 28-54; column 10, lines 19-53; column 11, lines 24-62; column 12, lines 26-56; column 15, lines 60-67; column 33, lines 31-47; column 46, lines 27-33).

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Regarding claim 38, Davis discloses where the data structure is a hierarchy (column 21, lines 46-59; column 29, lines 31-56; column 30, lines 51-57; column 31, lines 5-7).

Regarding claims 39 and 47, Davis discloses where the common schema includes a data dictionary (column 15, lines 60-67; column 21, lines 46-59; column 30, lines 51-57; column 31, lines 5-7; column 33, lines 44-47).

Regarding claim 45, Davis discloses where the physical object or substance comprises an organization and the common schema includes an organization designation and data structure (column 8, lines 28-54; column 10, lines 19-53; column 11, lines 24-62; column 12, lines 26-56; column 15, lines 60-67; column 33, lines 31-47; column 46, lines 27-33).

Regarding claim 137, Davis discloses where a common schema includes attributes selected from the group consisting of organization designation, data structure, metadata standard, data dictionary and combinations thereof (column 8, lines 37-46 and lines 52-57; column 10, lines 25-33 and lines 52-55; column 11, lines 24-66; column 12, lines 45-56; column 13, lines 34-37; column 15, lines 60-67; column 18, lines 48-54; column 26, lines 65-67; column 27, lines 1-5; column 28, lines 31-34; column 30, lines 42-60; column 33, lines 15-47; column 37, lines 5-8; column 38, lines 48-56; column 46, lines 27-33).

Regarding claims 36, 46 and 138, Davis discloses wherein the designated organization is a single product, a group of products, a division, a company, a multi-company corporation or a value chain (column 8, lines 37-40; column 10, lines 25-30; column 11, lines 52-62; column 33, lines 31-47; column 46, lines 27-33).

Regarding claims 42 and 50, Davis discloses wherein at least a portion of the data are from the Internet or an external database (column 8, lines 24-34; column 11, lines 24-27; column 12, lines 26-31).

Regarding claim 43, Davis discloses where the data preparation method further comprises converting data to match a common schema and storing the converted data in a central database (column 11, lines 15-67; column 12, lines 26-56; column 27, lines 1-6).

Regarding claim 51, Davis discloses where the data preparation method further comprises converting and storing data in accordance with the common schema (column 11, lines 15-67; column 12, lines 26-56; column 27, lines 1-6).

Regarding claim 143, Davis discloses wherein the schema is statistically valid (column 8, lines 28-54; column 10, lines 19-53; column 11, lines 24-62; column 12, lines 26-56; column 15, lines 60-67; column 33, lines 31-47; column 46, lines 27-33).

Regarding claim 136, Davis discloses using metadata mapping to convert and store data in accordance with a common schema using one or more schema defined categories (column 4, lines 17-32; column 10, lines 19-30; column 13, lines 37-40 and lines 45-50; column 15, lines 56-67; column 17, line 66 – column 18, line 9; column 18, lines 48-64; column 19, lines 3-13; column 20, lines 32-38; column 21, lines 56-59; column 31, lines 5-7; column 33, lines 44-47; column 38, lines 48-65; column 49, lines 19-50; column 50, lines 38-49).

Regarding claims 142, Davis discloses wherein at least some data are pre-specified for integration (column 10, lines 25-30; column 12, lines 26-56; column 15, lines 60-67; column 21, lines 46-59).

Regarding claim 149, Davis discloses wherein the data method further comprises storing a plurality of converted data in one or more tables to support organization processing (column 11, lines 15-67; column 12, lines 26-56; column 27, lines 1-6).

Claim Rejections - 35 USC § 103

Claims 62-63, 68, 70, 90, 134 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, in view of “How to sort out the premium drivers of post-deal value) by Daniel Bielinski (further referred to as Bielinski), in view of US Patent 6,018,722 to Ray et al. (further referred to as Ray), and further in view of “The 1986-88 Stock Market: Investor Sentiment or Fundamentals?” by Bauer et al. (further referred to as Bauer).

Regarding claim 62, Davis discloses a computer readable medium having sequences of instructions stored therein, which when executed cause the processor in a plurality of computers that have been connected via a network to perform an organization management method, comprising:

Transforming data representative of an organization (column 8, lines 29-34; column 10, lines 25-26; column 11, lines 24-27; column 12, lines 26-29 and lines 53-56; column 28, lines 31-34; column 38, lines 50-53)

From a plurality of systems (column 8, lines 29-34; column 10, lines 25-26; column 11, lines 24-27; column 12, lines 26-29 and lines 53-56; column 28, lines 31-34; column 38, lines 50-53)

Into an integrated database that stores data (column 11, lines 15-64; column 12, lines 45-56; column 13, lines 18-40; column 15, lines 23-42; column 16, lines 11-15; column 26, lines 47-67; column 49, lines 20-28)

In accordance with an xml metadata standard and a common schema (column 8, lines 40-46 and lines 52-57; column 10, lines 31-33 and lines 52-55; column 11, lines 24-66; column 12, lines 45-56; column 13, lines 34-37; column 15, lines 60-67; column 18, lines 48-54; column 26, lines 65-67; column 27, lines 1-5; column 28, lines 31-34; column 30, lines 42-50; column 30, lines 51-60; column 33, lines 15-47; column 37, lines 5-8; column 38, lines 48-56), and

Using at least a portion of said data to create and output one or more tools for organization management (column 8, lines 29-34 and lines 40-51; column 9, lines 1-6; column 10, lines 19-30; column 12, lines 15-17; column 13, lines 19-23; column 25, lines 53-60; column 26, lines 47-67; column 28, lines 31-40; column 36, lines 59-67; column 37, lines 5-12; column 38, lines 48-65),

Where the one or more tools for organization management further comprise one or more tools selected from the group consisting of analytical models, category of value models, component of value models, market value models, network models, management reports, and combinations thereof (column 8, lines 36-46; column 10, lines 38-53; column 11, lines 52-55; column 28, lines 31-39; column 33, lines 15-47; column 36, lines 59-67; column 38, lines 48-65; column 44, lines 22-34; column 45, lines 1-63; column 46, lines 27-38).

Davis does not disclose where tools are selected from the group consisting of optimization models, simulation models, value chains models, lists of changes that will optimize one or more aspects of organization financial performance. However, Bielinski discloses where the tools are selected from the group consisting of optimization models,

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simulation models, value chains models, lists of changes that will optimize one or more aspects of organization financial performance (page 1, paragraphs 1 and 2; page 2, paragraphs 1, 6 and 8; page 3, paragraphs 1 and 2; page 4, paragraphs 1, 8 and 10; page 5, paragraphs 1-4).

It would be obvious to one of ordinary skill in the art at the time of the invention to modify the use of tools such as analytical models, management summary reports, etc. as disclosed by Davis to adapt the use of tools such as optimization models and lists of changes optimizing organization financial performance, etc. as disclosed by Bielinski. The motivation would be that all of the tools described by Davis and Bielinski are useful for making evaluations of companies and when financial data is received from multiple external sources as disclosed by Davis, it would be obvious to use the data in order to provide meaningful statistics and data for reviewers and decision makers. Further, it is noted that the claim is set forth as a Markush claim and as such each of the items within the set are admittedly within a group known in the art. Therefore, it would further be obvious to provide evaluation tools as are known to be part of a group in the art.

Neither Davis nor Bielinski disclose where one or more of the tools comprise a system for automated trading of organization equity based on a calculated market sentiment. However, Ray discloses a system for automated trading of organization equity (at least abstract). It would be obvious to one of ordinary skill in the art to modify the use of Internets and Intranets for interacting and evaluating financial data as disclosed by the combination of Davis and Bielinski to incorporate a system for automated trading of equity as disclosed by Ray. The motivation would be that Davis

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and Bielinski provide for a fully interactive system and method using the Internet and wherein a user uses financial data from a plurality of sources in order to use charts, graphs, spreadsheets, etc. in order to view, manipulate, compare and manage the financial data such that evaluations and conclusions can be drawn regarding the data and providing an automated trading tool enables a user to do something with the results of their analysis without going to a trading website to perform a trade. It would therefore be obvious to provide a system for automated trading as disclosed by Ray based the collection of data and based on a financial evaluation as is performed by the system and method of Davis and Bielinski.

Further, Ray discloses a trading system where stock price is based on the public's perception and sentiment towards the company as reflected in the stock price (at least abstract; column 2, lines 19-48; column 3, lines 19-22) but does not specifically disclose a calculated market sentiment value. However, Bauer discloses a calculated market sentiment value (abstract; page 2, "Stock prices and investor sentiment"; page 3, formula 3). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the system of integrating organization data for outputting calculated results from the data, and the valuation modeling techniques with automated trading of securities as disclosed by the combination of Davis, Bielinski and Ray, to adapt the use of sentiment as a value driver and to calculate stock price using sentiment as disclosed by Bauer. The motivation would be that stock price is calculated based on company value and a company value is derived from real and intangible assets of value and for most accurate pricing, one would want to incorporate all assets, real and intangible.

Regarding claim 63, Davis discloses where the one or more tools are made available for review using an electronic display, a paper document or combinations thereof (column 4, lines 33-45).

Regarding claim 68, Davis discloses where the common schema defines common attributes selected from the group consisting of data structure, organization designation, data dictionary and combinations thereof (column 8, lines 28-54; column 10, lines 19-53; column 11, lines 24-62; column 12, lines 26-56; column 15, lines 60-67; column 21, lines 46-59; column 30, lines 51-57; column 31, lines 5-7; column 33, lines 31-47; column 46, lines 27-33).

Regarding claim 70, Davis discloses where the data structure is a hierarchy (column 21, lines 46-59; column 29, lines 31-56; column 30, lines 51-57; column 31, lines 5-7).

Regarding claim 90, Davis discloses wherein the one or more aspects of organization financial performance are selected from the group consisting of organization revenue, organization expense organizational capital change and combinations thereof (column 8, lines 36-46; column 9, lines 59-65; column 10, lines 38-53; column 11, lines 53-62; column 13, lines 20-30; column 28, lines 36-39; column 32,

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lines 27-67; column 33, lines 15-47; column 39, line 61 – column 40, line 50; column 45, lines 1-14; column 45, lines 35-50).

Davis does not disclose where financial performance is selected from the group consisting of organization current operation value, organization real option value, organization market sentiment value and organization market value. However, Bielinski discloses where financial performance is selected from the group consisting of organization current operation value, organization real option value and organization market value (page 1, paragraphs 1-2; page 2, paragraphs 1 and 8; page 3, paragraphs 1 and 2; page 4, paragraphs 5, 8 and 10).

It would be obvious to one of ordinary skill in the art at the time of the invention to modify the use of tools such as performance aspects as revenue and expenses as disclosed by Davis to adapt the use performance aspects such as real option value and market value, etc. as disclosed by Bielinski. The motivation would be that all of the tools described by Davis and Bielinski are useful for making evaluations of companies and when financial data is received from multiple external sources as disclosed by Davis, it would be obvious to use the data in order to provide meaningful statistics and data for reviewers and decision makers. Further, it is noted that the claim is set forth as a Markush claim and as such each of the items within the set are admittedly within a group known in the art. Therefore, it would further be obvious to provide evaluation tools as are known to be part of a group in the art.

Neither Davis nor Bielinski specifically disclose market sentiment. However, Ray discloses a trading system where stock price is based on the public's perception and

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sentiment towards the company as reflected in the stock price (at least abstract; column 2, lines 19-48; column 3, lines 19-22). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the use of performance aspects including Revenue, expenses, real options value as disclosed by Davis and Bielinski to adapt the performance aspect of market sentiment as disclosed by Ray. The motivation would be that each of the mentioned indicators are used for measuring, comparing, and evaluating a company's financial performance.

Regarding claim 134, Davis discloses the use of relative importance of the different elements of value, categories of value and enterprises in determining organization financial performance as required to support the development of one or more tools for organization management (column 20, lines 32-38; column 21, lines 46-59; column 24, lines 15-24; column 25, lines 53-63; column 26, lines 47-67; column 27, lines 1-5; column 28, lines 31-42; column 29, lines 39-56; column 30, lines 51-60; column 31, lines 5-7 and lines 26-51).

Neither Davis nor Bielinski disclose where this is learned. However, Ray discloses where this is learned (column 8, lines 23-38). It would be obvious to one of ordinary skill in the art to modify the retrieving, gathering, and calculations with values of financial performance with relative importance as disclosed by the combination of Davis and Bielinski to adapt the learning of the importance as disclosed by Ray. The motivation would be that Davis and Bielinski provide for the measurement and determination of financial performance using financial data and using such techniques

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as metadata and simulation for making such an evaluation. Providing a neural network enhances the ability of the system to learn and think as a human would think in terms of the data, and the interpretations made thereof.

Claims 40-41, 48-49, 139-140, 146, 150-151 and 154 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Official Notice.

Regarding claims 40, 48 and 139, Davis discloses where the data dictionary defines standard data attributes from the group consisting of components of value, currencies, elements of value, units of measure and time periods (column 8, lines 30-51; column 10, lines 31-53; column 11, lines 24-67; column 13, lines 46-49; column 20, lines 32-65; column 25, lines 30-52; column 26, lines 15-25 and lines 34-67).

Davis does not disclose where the data dictionary defines data attributes for account numbers. However, Examiner takes Official Notice that it is old and well known that account numbers are one way of identifying an account and that accounts and account numbers are used in database management and as a way of storing and organizing data and it would be obvious therefore to include account numbers in the data dictionary. Further, it is noted that the claim is set forth as a Markush claim and as such each of the items within the set are admittedly within a group known in the art. Therefore, examiner takes Official Notice that it is old and well known and would have been obvious to one of ordinary skill in the art that data could be from any types of indicators as are known to be part of a group in the art as listed in the claim.

Regarding claims 41 and 49, Davis discloses where data are obtained a plurality of systems selected from the group consisting of advanced financial systems, basic financial systems and alliance management systems (column 9, lines 59-67; column 10, lines 38-53; column 28, lines 31-39; column 44, lines 27-30; column 45, lines 1-50; column 46, lines 27-34; column 49, lines 28-37).

Davis does not disclose data are selected from the exhaustive list as disclosed in the claim limitation. However, Davis discloses the above mentioned specific enterprise systems, as well as disclosing the receiving of data from a plurality of sources and systems over the Internet. Further, it is noted that the claim is set forth as a Markush claim and as such each of the items within the set are admittedly within a group known in the art. Therefore, examiner takes Official Notice that it is old and well known to one of ordinary skill in the art and would have been obvious to one of ordinary skill in the art that data could be from any types of organizations as are known to be part of a group in the art as listed in the claim.

Regarding claim 140, Davis discloses wherein a plurality of organization related systems are database management systems for systems selected from the group consisting of advanced financial systems, basic financial systems and alliance management systems (column 9, lines 59-67; column 10, lines 38-53; column 28, lines 31-39; column 44, lines 27-30; column 45, lines 1-50; column 46, lines 27-34; column 49, lines 28-37).

Davis does not disclose where systems are selected from the exhaustive list as disclosed in the claim limitation. However, Davis discloses the above mentioned specific enterprise systems, as well as disclosing the receiving of data from a plurality of sources and systems over the Internet. Further, it is noted that the claim is set forth as a Markush claim and as such each of the items within the set are admittedly within a group known in the art. Therefore, examiner takes Official Notice that it is old and well known to one of ordinary skill in the art and would have been obvious to one of ordinary skill in the art that enterprises could be from any types of organizations as are known to be part of a group in the art as listed in the claim.

Regarding claim 146, Davis discloses wherein a plurality of systems are selected from the group consisting of advanced financial systems, basic financial systems and alliance management systems (column 9, lines 59-67; column 10, lines 38-53; column 28, lines 31-39; column 44, lines 27-30; column 45, lines 1-50; column 46, lines 27-34; column 49, lines 28-37).

Davis does not disclose where enterprise related systems are selected from the exhaustive list as disclosed in the claim limitation. However, Davis discloses the above mentioned specific enterprise systems, as well as disclosing the receiving of data from a plurality of sources and systems over the Internet. Further, it is noted that the claim is set forth as a Markush claim and as such each of the items within the set are admittedly within a group known in the art. Therefore, examiner takes Official Notice that it is old and well known to one of ordinary skill in the art and would have been obvious to one of

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ordinary skill in the art that enterprises could be from any types of organizations as are known to be part of a group in the art as listed in the claim.

Regarding claim 150, Davis discloses a data preparation system, comprising:

A computer with a processor having circuitry to execute instructions (Figure 2; column 13, line 61 - column 14, line 67);

A storage device available to said processor with sequences of instructions stored therein (Figure 2; column 13, line 61 – column 14, line 67), which when executed cause the processor to:

Use metadata mapping (column 4, lines 17-32; column 10, lines 19-30; column 13, lines 37-40 and lines 45-50; column 15, lines 56-67; column 17, line 66 – column 18, line 9; column 18, lines 48-64; column 19, lines 3-13; column 20, lines 32-38; column 21, lines 56-59; column 31, lines 5-7; column 33, lines 44-47; column 38, lines 48-65; column 49, lines 19-50; column 50, lines 38-49)

To integrate and convert a plurality of data from a plurality of enterprise related systems (column 8, lines 29-34; column 10, lines 25-26; column 11, lines 24-27; column 12, lines 26-29 and lines 53-56; column 28, lines 31-34; column 38, lines 50-53)

In accordance with xml and a common schema (column 8, lines 40-46 and lines 52-57; column 10, lines 31-33 and lines 52-55; column 11, lines 24-66; column 12, lines 45-56; column 13, lines 34-37; column 15, lines 60-67; column 18, lines 48-54; column 26, lines 65-67; column 27, lines 1-5; column 28, lines 31-34; column 30, lines 42-50;

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column 30, lines 51-60; column 33, lines 15-47; column 37, lines 5-8; column 38, lines 48-56)

To transform said data into an integrated database and output said [database – data per 112] (column 11, lines 15-64; column 12, lines 45-56; column 13, lines 18-40; column 15, lines 23-42; column 16, lines 11-15; column 26, lines 47-67; column 49, lines 20-28)

Where metadata mapping is guided by a metadata mapping table (column 10, lines 19-53; column 11, lines 24-64; column 12, lines 45-56; column 15, lines 60-67; column 18, lines 2-14; column 20, lines 32-38; column 21, lines 26-61; column 30, lines 51-58; column 33, lines 28-47; column 49, lines 19-47; column 50, lines 38-45), and

Where a plurality of enterprise related systems are selected from the group consisting of advanced financial systems, basic financial systems and alliance management systems (column 9, lines 59-67; column 10, lines 38-53; column 28, lines 31-39; column 44, lines 27-30; column 45, lines 1-50; column 46, lines 27-34; column 49, lines 28-37).

Davis does not disclose where enterprise related systems are selected from the exhaustive list as disclosed in the claim limitation. However, Davis discloses the above mentioned specific enterprise systems, as well as disclosing the receiving of data from a plurality of sources and systems over the Internet. Further, it is noted that the claim is set forth as a Markush claim and as such each of the items within the set are admittedly within a group known in the art. Therefore, examiner takes Official Notice that it is old and well known to one of ordinary skill in the art and would have been obvious to one of

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ordinary skill in the art that enterprises could be from any types of organizations as are known to be part of a group in the art as listed in the claim.

Regarding claims 151, Davis discloses wherein at least some data are pre-specified for integration (column 10, lines 25-30; column 12, lines 26-56; column 15, lines 60-67; column 21, lines 46-59).

Regarding claim 154, Davis discloses wherein at least a portion of the data are obtained from an Internet or an external database (column 8, lines 24-34; column 11, lines 24-27; column 12, lines 26-31).

Claims 144, 147, 155-157, 159, 161 and 163 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, and further in view of US Patent 6,549,922 B1 to Srivastava et al. (further referred to as Srivastava).

Regarding claim 155, Davis discloses a program storage device readable by machine, tangible embodying a program of instructions executable by a machine to perform the method steps in a data processing method, comprising:

Using metadata mapping (column 4, lines 17-32; column 10, lines 19-30; column 13, lines 37-40 and lines 45-50; column 15, lines 56-67; column 17, line 66 – column 18, line 9; column 18, lines 48-64; column 19, lines 3-13; column 20, lines 32-38; column

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21, lines 56-59; column 31, lines 5-7; column 33, lines 44-47; column 38, lines 48-65; column 49, lines 19-50; column 50, lines 38-49)

To integrate a plurality of data representative of an enterprise from a plurality of enterprise related systems (column 8, lines 29-34; column 10, lines 25-26; column 11, lines 24-27; column 12, lines 26-29 and lines 53-56; column 28, lines 31-34; column 38, lines 50-53)

In accordance with xml and a common schema (column 8, lines 40-46 and lines 52-57; column 10, lines 31-33 and lines 52-55; column 11, lines 24-66; column 12, lines 45-56; column 13, lines 34-37; column 15, lines 60-67; column 18, lines 48-54; column 26, lines 65-67; column 27, lines 1-5; column 28, lines 31-34; column 30, lines 42-50; column 30, lines 51-60; column 33, lines 15-47; column 37, lines 5-8; column 38, lines 48-56)

to transform said data into an integrated database that stores data using one or more schema defined categories in accordance with said schema and output said [database – data per 112] (column 11, lines 15-64; column 12, lines 45-56; column 13, lines 18-40; column 15, lines 23-42; column 16, lines 11-15; column 26, lines 47-67; column 49, lines 20-28)

Where metadata mapping is guided by a metadata mapping table (column 10, lines 19-53; column 11, lines 24-64; column 12, lines 45-56; column 15, lines 60-67; column 18, lines 2-14; column 20, lines 32-38; column 21, lines 26-61; column 30, lines 51-58; column 33, lines 28-47; column 49, lines 19-47; column 50, lines 38-45).

Davis does not disclose where a metadata and conversion rules window is used to establish a metadata mapping table. However, Srivastava discloses where a metadata and conversion rules window is used to establish a metadata mapping table (Figure 2; column 3, lines 27-62; column 5, lines 14-18; column 6, lines 15-18; column 7, lines 27-31). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the use of metadata mapping tables as disclosed by Davis to provide a window for establishing the tables as disclosed by Srivastava. The motivation is that GUIs use windows for providing a user interface for such functions as defining a metadata table and it would be obvious to use a commonly known technique for establishing tables, namely the providing of a window, as disclosed by Srivastava.

Regarding claim 159, Davis discloses a computer implemented data method, comprising:

Using metadata mapping (column 4, lines 17-32; column 10, lines 19-30; column 13, lines 37-40 and lines 45-50; column 15, lines 56-67; column 17, line 66 – column 18, line 9; column 18, lines 48-64; column 19, lines 3-13; column 20, lines 32-38; column 21, lines 56-59; column 31, lines 5-7; column 33, lines 44-47; column 38, lines 48-65; column 49, lines 19-50; column 50, lines 38-49)

To integrate a plurality of data representative of an enterprise that physically exists from a plurality of enterprise related systems (column 8, lines 29-34; column 10, lines 25-26; column 11, lines 24-27; column 12, lines 26-29 and lines 53-56; column 28, lines 31-34; column 38, lines 50-53)

In accordance with xml and a common schema (column 8, lines 40-46 and lines 52-57; column 10, lines 31-33 and lines 52-55; column 11, lines 24-66; column 12, lines 45-56; column 13, lines 34-37; column 15, lines 60-67; column 18, lines 48-54; column 26, lines 65-67; column 27, lines 1-5; column 28, lines 31-34; column 30, lines 42-50; column 30, lines 51-60; column 33, lines 15-47; column 37, lines 5-8; column 38, lines 48-56)

to support organization processing (column 8, lines 29-34 and lines 40-51; column 9, lines 1-6; column 10, lines 19-30; column 12, lines 15-17; column 13, lines 19-23; column 25, lines 53-60; column 26, lines 47-67; column 28, lines 31-40; column 36, lines 59-67; column 37, lines 5-12; column 38, lines 48-65)

to transform said data into an integrated database that stores data in accordance with said schema and output said [database – data per 112] (column 11, lines 15-64; column 12, lines 45-56; column 13, lines 18-40; column 15, lines 23-42; column 16, lines 11-15; column 26, lines 47-67; column 49, lines 20-28)

Where metadata mapping is guided by a metadata mapping table (column 10, lines 19-53; column 11, lines 24-64; column 12, lines 45-56; column 15, lines 60-67; column 18, lines 2-14; column 20, lines 32-38; column 21, lines 26-61; column 30, lines 51-58; column 33, lines 28-47; column 49, lines 19-47; column 50, lines 38-45).

Davis does not disclose where a metadata and conversion rules window is used to establish a metadata mapping table. However, Srivastava discloses where a metadata and conversion rules window is used to establish a metadata mapping table

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(Figure 2; column 3, lines 27-62; column 5, lines 14-18; column 6, lines 15-18; column 7, lines 27-31). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the use of metadata mapping tables as disclosed by Davis to provide a window for establishing the tables as disclosed by Srivastava. The motivation is that GUIs use windows for providing a user interface for such functions as defining a metadata table and it would be obvious to use a commonly known technique for establishing tables, namely the providing of a window, as disclosed by Srivastava.

Regarding claims 144, 147 and 161, Davis discloses wherein a set of integration and conversion rules are saved in a metadata mapping table (column 10, lines 19-53; column 11, lines 24-64; column 12, lines 45-56; column 15, lines 60-67; column 18, lines 2-14; column 20, lines 32-38; column 21, lines 26-61; column 30, lines 51-58; column 33, lines 28-47; column 49, lines 19-47; column 50, lines 38-45).

Davis does not disclose wherein the set of integration and conversion rules are established using a metadata and conversion rules window. However, Srivastava discloses where the set of integration and conversion rules are established using a metadata and conversion rules window (Figure 2; column 3, lines 27-62; column 5, lines 14-18; column 6, lines 15-18; column 7, lines 27-31). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the use of metadata mapping tables as disclosed by Davis to provide a window for establishing the tables as disclosed by Srivastava. The motivation is that GUIs use windows for providing a user interface for such functions as defining a metadata table and it would be obvious to use

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a commonly known technique for establishing tables, namely the providing of a window, as disclosed by Srivastava.

Regarding claim 156, Davis discloses wherein at least some data are pre-specified for integration and conversion (column 10, lines 25-30; column 12, lines 26-56; column 15, lines 60-67; column 21, lines 46-59).

Regarding claim 157, Davis discloses wherein a plurality of integrated enterprise data are stored in an application database in accordance with a common schema (column 8, lines 40-46 and lines 52-57; column 10, lines 31-33 and lines 52-55; column 11, lines 15-67; column 12, lines 26-56; column 13, lines 34-37; column 15, lines 60-67; column 18, lines 48-54; column 26, lines 65-67; column 27, lines 1-6; column 28, lines 31-34; column 30, lines 42-50; column 30, lines 51-60; column 33, lines 15-47; column 37, lines 5-8; column 38, lines 48-56).

Regarding claim 163, Davis discloses wherein the data method further comprises storing a plurality of converted data in one or more tables to support organization processing (column 11, lines 15-67; column 12, lines 26-56; column 27, lines 1-6).

Claims 158, 160 and 164-167 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, in view of US Patent 6,549,922 B1 to Srivastava et al. (further referred to as Srivastava), and further in view of Official Notice.

Regarding claims 158 and 160, Davis discloses wherein a plurality of systems are selected from the group consisting of advanced financial systems, basic financial systems and alliance management systems (column 9, lines 59-67; column 10, lines 38-53; column 28, lines 31-39; column 44, lines 27-30; column 45, lines 1-50; column 46, lines 27-34; column 49, lines 28-37).

Neither Davis nor Srivastava disclose where enterprise related systems are selected from the exhaustive list as disclosed in the claim limitation. However, Davis discloses the above mentioned specific enterprise systems, as well as disclosing the receiving of data from a plurality of sources and systems over the Internet. Further, it is noted that the claim is set forth as a Markush claim and as such each of the items within the set are admittedly within a group known in the art. Therefore, examiner takes Official Notice that it is old and well known to one of ordinary skill in the art and would have been obvious to one of ordinary skill in the art that enterprises could be from any types of organizations as are known to be part of a group in the art as listed in the claim.

Regarding claim 164, Davis discloses a data preparation system, comprising:

A computer with a processor having circuitry to execute instructions (Figure 2; column 13, line 61 - column 14, line 67);

A storage device available to said processor with sequences of instructions stored therein (Figure 2; column 13, line 61 – column 14, line 67), which when executed cause the processor to:

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Use metadata mapping (column 4, lines 17-32; column 10, lines 19-30; column 13, lines 37-40 and lines 45-50; column 15, lines 56-67; column 17, line 66 – column 18, line 9; column 18, lines 48-64; column 19, lines 3-13; column 20, lines 32-38; column 21, lines 56-59; column 31, lines 5-7; column 33, lines 44-47; column 38, lines 48-65; column 49, lines 19-50; column 50, lines 38-49)

To integrate and convert a plurality of data representative of an enterprise that physically exists from a plurality of enterprise related systems (column 8, lines 29-34; column 10, lines 25-26; column 11, lines 24-27; column 12, lines 26-29 and lines 53-56; column 28, lines 31-34; column 38, lines 50-53)

In accordance with xml and a common schema (column 8, lines 40-46 and lines 52-57; column 10, lines 31-33 and lines 52-55; column 11, lines 24-66; column 12, lines 45-56; column 13, lines 34-37; column 15, lines 60-67; column 18, lines 48-54; column 26, lines 65-67; column 27, lines 1-5; column 28, lines 31-34; column 30, lines 42-50; column 30, lines 51-60; column 33, lines 15-47; column 37, lines 5-8; column 38, lines 48-56)

to transform said data into an integrated database and output said [database – data per 112] (column 11, lines 15-64; column 12, lines 45-56; column 13, lines 18-40; column 15, lines 23-42; column 16, lines 11-15; column 26, lines 47-67; column 49, lines 20-28)

Where metadata mapping is guided by a metadata mapping table (column 10, lines 19-53; column 11, lines 24-64; column 12, lines 45-56; column 15, lines 60-67;

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column 18, lines 2-14; column 20, lines 32-38; column 21, lines 26-61; column 30, lines 51-58; column 33, lines 28-47; column 49, lines 19-47; column 50, lines 38-45), and

Where a plurality of enterprise related systems are selected from the group consisting of advanced financial systems, basic financial systems and alliance management systems.

Davis does not disclose where a metadata and conversion rules window is used to establish a metadata mapping table. However, Srivastava discloses where a metadata and conversion rules window is used to establish a metadata mapping table (Figure 2; column 3, lines 27-62; column 5, lines 14-18; column 6, lines 15-18; column 7, lines 27-31). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the use of metadata mapping tables as disclosed by Davis to provide a window for establishing the tables as disclosed by Srivastava. The motivation is that GUIs use windows for providing a user interface for such functions as defining a metadata table and it would be obvious to use a commonly known technique for establishing tables, namely the providing of a window, as disclosed by Srivastava.

Neither Davis nor Srivastava disclose where enterprise related systems are selected from the exhaustive list as disclosed in the claim limitation. However, the combination of Davis and Srivastava discloses the above mentioned specific enterprise systems, as well as disclosing the receiving of data from a plurality of sources and systems over the Internet. Further, it is noted that the claim is set forth as a Markush claim and as such each of the items within the set are admittedly within a group known in the art. Therefore, examiner takes Official Notice that it is old and well known to one

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of ordinary skill in the art and would have been obvious to one of ordinary skill in the art that enterprises could be from any types of organizations as are known to be part of a group in the art as listed in the claim.

Regarding claims 165, Davis discloses wherein at least some data are pre-specified for integration and conversion (column 10, lines 25-30; column 12, lines 26-56; column 15, lines 60-67; column 21, lines 46-59).

Regarding claim 166, Davis discloses where a common schema identifies data designations selected from the group consisting of components of value, sub components of value, elements of value and sub elements of value (column 8, lines 30-51; column 10, lines 31-53; column 11, lines 24-67; column 13, lines 46-49; column 20, lines 32-65; column 25, lines 30-52; column 26, lines 15-25 and lines 34-67; column 29, lines 31-56; column 30, lines 51-58; column 44, lines 22-34; column 45, lines 40-50; column 49, lines 19-43).

Neither Davis nor Srivastava disclose identifying known value drivers and non-relevant attributes. However, Bielinski discloses disclose identifying known value drivers and non-relevant attributes (page 1, paragraph 2; page 2, paragraphs 1 and 8; page 3, paragraphs 102; paragraph 4, paragraph 1; page 5, paragraphs 3-4). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the use of identifying data schema such as components of value and sub components of value as disclosed by the combination of Davis and Srivastava to adapt the identifying of data

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schema such as value drivers as disclosed by Bielinski. The motivation would be that all of the data identifiers described by Davis and Bielinski are useful for making evaluations of companies and when financial data is received from multiple external sources as disclosed by Davis, it would be obvious to use the data in order to provide meaningful statistics and data for reviewers and decision makers, where the received data would need to be identified for storage and manipulation.

Regarding claim 167, Davis discloses wherein at least a portion of the data are obtained from an Internet or an external database (column 8, lines 24-34; column 11, lines 24-27; column 12, lines 26-31).

Claims 64, 69 and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Bielinski, Ray and Bauer as applied to claim 62 above, and further in view of Official Notice.

Regarding claim 64, Davis discloses wherein a plurality of systems are selected from the group consisting of advanced financial systems, basic financial systems and alliance management systems (column 9, lines 59-67; column 10, lines 38-53; column 28, lines 31-39; column 44, lines 27-30; column 45, lines 1-50; column 46, lines 27-34; column 49, lines 28-37).

Neither Davis, Bielinski, Ray nor Bauer disclose where enterprise related systems are selected from the exhaustive list as disclosed in the claim limitation.

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However, Davis discloses the above mentioned specific enterprise systems, as well as disclosing the receiving of data from a plurality of sources and systems over the Internet. Further, it is noted that the claim is set forth as a Markush claim and as such each of the items within the set are admittedly within a group known in the art.

Therefore, examiner takes Official Notice that it is old and well known to one of ordinary skill in the art and would have been obvious to one of ordinary skill in the art that enterprises could be from any types of organizations as are known to be part of a group in the art as listed in the claim.

Regarding claim 69, Davis discloses where the data dictionary defines standard data attributes from the group consisting of components of value, currencies, elements of value, units of measure and time periods (column 8, lines 30-51; column 10, lines 31-53; column 11, lines 24-67; column 13, lines 46-49; column 20, lines 32-65; column 25, lines 30-52; column 26, lines 15-25 and lines 34-67).

Neither Davis, Bielinski, Ray nor Bauer disclose where the data dictionary defines data attributes for account numbers. However, Examiner takes Official Notice that it is old and well known that account numbers are one way of identifying an account and that accounts and account numbers are used in database management and as a way of storing and organizing data and it would be obvious therefore to include account numbers in the data dictionary. Further, it is noted that the claim is set forth as a Markush claim and as such each of the items within the set are admittedly within a group known in the art. Therefore, examiner takes Official Notice that it is old and well

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known and would have been obvious to one of ordinary skill in the art that data could be from any types of indicators as are known to be part of a group in the art as listed in the claim.

Regarding claim 91, Davis does not disclose wherein identified changes include the changes as listed in the claim language. However, Bielinski discloses where identified changes include changes to value drivers such as organization equity and production equipment value drivers, employee value drivers (page 2, paragraphs 1, 6, 8; page 5, paragraph 3). Given the combination of Davis and Bielinski as given in claim 62, it would be obvious to use the above changes as each of the changes represents among those things an organization change vary and change in order to see modified financial performance. The motivation in adapting these changes would be that they represent among the common factors that companies can review and consider for modification when a financial performance change is desired or required.

Neither Davis, Bielinski, Ray nor Bauer disclose the exhaustive list as disclosed in the claim language. However, it is noted that the claim is set forth as a Markush claim and as such each of the items within the set are admittedly within a group known in the art. Therefore, examiner takes Official Notice that it is old and well known and would have been obvious to one of ordinary skill in the art that changes could be from any types of changes as are known to be part of a group in the art as listed in the claim.

Claim 148 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis as applied to claim 145 above, and further in view of Bielinski.

Regarding claim 148, Davis discloses where a common schema identifies data designations selected from the group consisting of components of value, sub components of value, elements of value and sub elements of value (column 8, lines 30-51; column 10, lines 31-53; column 11, lines 24-67; column 13, lines 46-49; column 20, lines 32-65; column 25, lines 30-52; column 26, lines 15-25 and lines 34-67; column 29, lines 31-56; column 30, lines 51-58; column 44, lines 22-34; column 45, lines 40-50; column 49, lines 19-43).

Davis does not disclose identifying known value drivers and non-relevant attributes. However, Bielinski discloses disclose identifying known value drivers and non-relevant attributes (page 1, paragraph 2; page 2, paragraphs 1 and 8; page 3, paragraphs 102; paragraph 4, paragraph 1; page 5, paragraphs 3-4). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the use of identifying data schema such as components of value and sub components of value as disclosed by Davis to adapt the identifying of data schema such as value drivers as disclosed by Bielinski. The motivation would be that all of the data identifiers described by Davis and Bielinski are useful for making evaluations of companies and when financial data is received from multiple external sources as disclosed by Davis, it would be obvious to use the data in order to provide meaningful statistics and data for

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reviewers and decision makers, where the received data would need to be identified for storage and manipulation.

Claim 152 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis and Official Notice as applied to claim 150 above, and further in view of Srivastava.

Regarding claim 152, Davis discloses wherein a set of integration and conversion rules are saved in a metadata mapping table (column 10, lines 19-53; column 11, lines 24-64; column 12, lines 45-56; column 15, lines 60-67; column 18, lines 2-14; column 20, lines 32-38; column 21, lines 26-61; column 30, lines 51-58; column 33, lines 28-47; column 49, lines 19-47; column 50, lines 38-45).

Davis does not disclose wherein the set of integration and conversion rules are established using a metadata and conversion rules window. However, Srivastava discloses where the set of integration and conversion rules are established using a metadata and conversion rules window (Figure 2; column 3, lines 27-62; column 5, lines 14-18; column 6, lines 15-18; column 7, lines 27-31). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the use of metadata mapping tables as disclosed by Davis to provide a window for establishing the tables as disclosed by Srivastava. The motivation is that GUIs use windows for providing a user interface for such functions as defining a metadata table and it would be obvious to use a commonly known technique for establishing tables, namely the providing of a window, as disclosed by Srivastava.

Claim 153 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis and Official Notice as applied to claim 150 above, and further in view of Bielinski.

Regarding claim 153, Davis discloses where a common schema identifies data designations selected from the group consisting of components of value, sub components of value, elements of value and sub elements of value (column 8, lines 30-51; column 10, lines 31-53; column 11, lines 24-67; column 13, lines 46-49; column 20, lines 32-65; column 25, lines 30-52; column 26, lines 15-25 and lines 34-67; column 29, lines 31-56; column 30, lines 51-58; column 44, lines 22-34; column 45, lines 40-50; column 49, lines 19-43).

Davis does not disclose identifying known value drivers and non-relevant attributes. However, Bielinski discloses disclose identifying known value drivers and non-relevant attributes (page 1, paragraph 2; page 2, paragraphs 1 and 8; page 3, paragraphs 102; paragraph 4, paragraph 1; page 5, paragraphs 3-4). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the use of identifying data schema such as components of value and sub components of value as disclosed by Davis to adapt the identifying of data schema such as value drivers as disclosed by Bielinski. The motivation would be that all of the data identifiers described by Davis and Bielinski are useful for making evaluations of companies and when financial data is received from multiple external sources as disclosed by Davis, it would be obvious to use the data in order to provide meaningful statistics and data for

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reviewers and decision makers, where the received data would need to be identified for storage and manipulation.

Claim 162 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis and Srivastava as applied to claim 159 above, and further in view of Bielinski.

Regarding claim 153, Davis discloses where a common schema identifies data designations selected from the group consisting of components of value, sub components of value, elements of value and sub elements of value (column 8, lines 30-51; column 10, lines 31-53; column 11, lines 24-67; column 13, lines 46-49; column 20, lines 32-65; column 25, lines 30-52; column 26, lines 15-25 and lines 34-67; column 29, lines 31-56; column 30, lines 51-58; column 44, lines 22-34; column 45, lines 40-50; column 49, lines 19-43).

Neither Davis nor Srivastava disclose identifying known value drivers and non-relevant attributes. However, Bielinski discloses disclose identifying known value drivers and non-relevant attributes (page 1, paragraph 2; page 2, paragraphs 1 and 8; page 3, paragraphs 102; paragraph 4, paragraph 1; page 5, paragraphs 3-4). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the use of identifying data schema such as components of value and sub components of value as disclosed by the combination of Davis and Srivastava to adapt the identifying of data schema such as value drivers as disclosed by Bielinski. The motivation would be that all of the data identifiers described by Davis and Bielinski are useful for making

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evaluations of companies and when financial data is received from multiple external sources as disclosed by Davis, it would be obvious to use the data in order to provide meaningful statistics and data for reviewers and decision makers, where the received data would need to be identified for storage and manipulation.

(10) Response to Argument

Appellant speaks to a number of supposed errors in the rejection of the claims in the present application. Examiner respectfully disagrees with the arguments and finds that the prior art references as applied in the Final Office Action are proper, pertinent, and relevant in disclosing the claims as submitted.

Appellant argues that the prior art references teach away from the claimed invention. Examiner respectfully disagrees and does not find any instances where the prior art cited teaches away from the claims as presented in the present application. Neither Davis, Bielinski, Ray, Bauer, nor Srivastava in anyway discredit or criticize the claims as presented in this application. It is stated that “the prior art’s mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed....” In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). >See also MPEP §2123.

It is further argued that the use of Bielinski, Ray and Baur are inappropriate references because the “are not reasonably pertinent to the claimed invention as they teach that there is no market sentiment value”. Examiner respectfully disagrees.

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Neither Bielinski, Ray nor Bauer speak against market sentiment. As noted above, none of the references teach away from market sentiment. Examiner contends that each of the references used represent analogous art with respect to the claims.

Bielinski is drawn to determining the premium drivers of post-deal value, using computer models to estimate the value of a company where multiple variables can be manipulated using models for optimization. Baur discloses the inclusion of sentiment in market pricing. And Ray teaches automatic trading of equities. Therefore, in reviewing the claims in the present application, each of these three references are pertinent and relevant. Again, the references do not teach that there is no market sentiment value, but rather simply do not disclose a market sentiment value. This distinction is critical.

Applicant has argued that the cited references fail to teach or suggest one or more limitations of the claims. However, examiner contends that each limitation has been addressed by a proper reference and through proper combinations. Every limitation has been addressed in the Office Action, with each claim limitation mapped, and every word of the claim taken into consideration. Due to the lengthy rejection presented above, the claims and their respective mapping will not be reiterated here. However, examiner contends that a thorough review and mapping of the claims has been conducted in accordance with procedures of claim interpretation and analysis.

Appellant argues that the combination of references would not provide for functionality as described. However, examiner notes that the arguments presented are outside the scope of the claims and that as presented, the references are proper combinations yielding predictable results. The elements for which the references were

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relied upon, based on the analogous art as described above, would properly be combined with functionality as disclosed. For example, Davis provides for the transforming of data representative of an organization from a plurality of systems into an integrated database accordance with an xml metadata standard and a common schema and using at least a portion of the data to create and output one or more tools for organization management using various models. Bielinski is then relied upon to disclose other model types as listed in the claims. Davis discloses certain of the models and Bielinski discloses other of the models. The use of various models is known for evaluation techniques, as disclosed by Davis and Bielinski. The structures by which the models are carried out are disclosed by Davis, and Bielinski provides for additional modeling techniques are recited in the claims. Examiner therefore contends that functionality would remain by using the models across the systems. Likewise, Ray is used to disclose the automated trading of organization equity. A full analysis of why Davis, Bielinski and Ray would be obvious is provided above, with motivations for combination which would provide for predictable results.

Appellant states that the “claimed invention comprises a surprising result – market sentiment (as defined) is relevant to securities trading. This is surprising because the teachings of all the references provided by the Examiner, namely that markets are always efficient and that security prices are always accurate, have surprisingly been found to be incorrect”. Examiner is unsure as to the nature of this argument. None of the references nor any statements made by the examiner speak to this concept of markets always being efficient and security prices always being

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accurate. Ray specifically discloses the consideration of market sentiment on pricing, and the other references do not disclose that the use of sentiment is a poor choice.

Appellant argues whether the examiner is skilled in the art stating "This apparent misrepresentation may be a product of the fact that the Examiner does not appear to have the requisite level of skill in the relevant arts..." and continues with "It is unlikely that anyone who understood the scientific and engineering principles applicable to the pertinent art would ever suggest Baur, Bielinski, Davis or Ray as a reference in support of an obviousness rejection for the claimed inventions...". Additional arguments are made as to whether the author of the Office Actions and persons signing the Office Actions are skilled and knowledgeable in the art. Examiner is unable to speak to this argument, but rather is focusing on addressing the claims and the rejections thereof as part of the Appeal Brief process. Hiring and training practices are outside the scope of examiner's expertise in addressing the claim limitations and arguments related thereto.

Likewise, Appellant has argued that examiner has failed to explain what would motivate someone to make the combinations as set forth above. However, examiner contends, again, the proper combinations and motivational statements have been provided. Evidence has been provided for the claim rejections, as provided above in the detailed mapping of each claim limitation, as well as with the motivation statements. Examiner contends that proper APA standards have been followed in all regards.

With regards to prior art arguments, examiner contends that the claims have been properly analyzed and rejected based on the prior art of record. Examiner contends that the level of detail in the claims has been properly considered, that the

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prior art has been properly mapped to the claim limitations, following all appropriate standards and procedures.

Several points within Davis are further argued. As detailed in the Office Action above, examiner finds that Davis teaches data integration. Davis teaches that data is received from a plurality of external sources, where it is then formatted in order to be integrated into a database and used for processing and generating useful outputs for users. The receiving of data from multiple sources, in multiple formats, and storing the data in a common format in an integrated database is both taught by Davis and old and well known to one of ordinary skill in the art. Likewise, examiner finds that Davis teaches metadata mapping. Davis discloses that as data is received from multiple sources, it is stored in a database and that the metadata mapping provides a structure by which the data is stored and then used for processing and generating useful results for users where Davis further discloses the outputting of data in various forms and structures.

The 101 rejection is argued. Examiner has rejected the method claims under 101 based on the guidance available at the time based on the Supreme Court decision for *Bielski and Langemyer et.* As detailed above, the Office's guidance to examiners is that a § 101 process must (1) be tied to a machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. *In re Bilski et al*, 88 USPQ 2d 1385 CAFC (2008); *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876).

Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

This rejection has been argued on several grounds. As noted in the Final Office Action, in the present application, data is being received and stored in a database for processing. As such, there is no transformation of a subject matter (such as an article or materials). Likewise, it is claimed in the preamble that the data preparation method is computer implemented. However, the body of the claim fails to be tied to a particular machine carrying out the method steps. It is argued in the Appeal Brief that the examiner failed to explain how the claimed inventions can be completed using mental processes. However, examiner notes that a method claim that recites pure mental steps is only one example of a claim which would fail to meet the requirements of 101. The Office's guidance to examiners is that a § 101 process must (1) be tied to a machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. Therefore, a method which could be performed using only mental steps would be an example of a claim which would be rejected under 101, but that is merely one example. The primary tests is whether a § 101 process is (1) tied to a machine or (2) transforms underlying subject matter (such as an article or materials) to a different state or thing. As examiner understands the 101 guidelines, the argument as presented on page 53 of the Appeal Brief that claims “describe processes

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for transforming data representative of things that physically exist (i.e. an organization) into a different state or thing: an integrated database that has utility in enabling forecasts, business performance analyses and simulations. As such that represent statutory subject matter.” is not a correct interpretation of the 101 guidelines related to data transformation.

Additionally, Appellant has argued the relevance of several other allowances based on the current 101 guidelines. Examiner notes that only the current guidelines are applied when examining a set of claims and claims that were previously issued may have been subject to a different set of guidelines. Only current guidelines are implemented when performing claim analysis.

It is also suggested by Appellant that different standards for 101 requirements are applied to the prosecution of claims for large entities and small entities. Examiner notes that only one standard is used for all applications regardless of the size of the entity making the submission, be it for 101, 102, 103 or other requirements. A single set of standards exist.

With regards to the arguments set forth regarding 112 first paragraph, examiner contends that the 112 first paragraph rejections are proper. Examiner has noted the phrases "an integrated database", "output said database", "a physical object", "a physical object or substance", "schema defined categories" and "schema is statistically valid" as the phrases which are unsupported in the specification or initial disclosure. While it is not required that the exact and specific words be used in the specification as support for the language amended into a claim, the language is required to be

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supported by the specification. Examiner contends that the phrases above were amended into the claims, but that there is not support for the phrases. Support is found in neither the use of specific and exact words, nor within provided or determined context from which the material can be obtained. In order to amend claims, the amendments must be supported by the initial disclosure be it in the drawings, specification or claims. However, upon presenting the amendments being discussed, there was no indication as to where support for these elements could be found, and examiner was unable to find support for these elements and therefore the 112 rejections were made. Examiner contends that the 112 rejections for new matter are proper and maintains the rejections.

The 112 second paragraph rejections are also argued. The 112 rejections as set forth above detail the lack of clarity found in the language and the rejections stand. Examiner contends that the meets and bounds of the claims are unclear based on the reasoning and rationale as detailed above and that the claims are unclear as presented. In each instance, the examiner stated what would be assumed for purposes of examination. In each case, the Appeal Brief notes that the examiner was incorrect. Examiner finds that supports the examiner's position that the claims are unclear as a reasonable interpretation of the claim limitation meets and bounds could not be inferred from the claim limitations as presented. Examiner finds that the 112 second paragraph rejections are proper and appropriate.

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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Jennifer Liversedge/

Examiner, Art Unit 3684

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